



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,371	03/18/2005	Seiji Kagawa	Q86813	4689
23373	7590	10/19/2006	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			O HERN, BRENT T	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/528,371

Applicant(s)

KAGAWA, SEIJI

Examiner

Brent T. O'Hern

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) 9-12, 19-57 and 61-64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 13-18 and 58-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 17 May 2005, 18 March 2005
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-18 and 45-64 and species A, claims 2-8, 13-18 and 58-60 in the reply filed on 3 October 2006 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8, 13-18 and 58-60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "**at least one selected from ... comprising it**" in claim 1, lines 2-3 and claim 4, lines 2-3 is vague and indefinite because it is unclear whether applicant is referring to at least one film, material or something else. Furthermore, it is unclear whether "comprising it" is referring to a sheet, a film, polybutylene terephthalate or something else.

The phrase "**said polybutylene terephthalate laminate film substantially recovering said first shape from said second shape when exposed to said temperature T_1 or higher**" in claim 1, lines 8-10 is vague and indefinite because it is unclear whether the laminate has a first shape, a second shape, is structurally limiting or something else.

Claim 16 recites the limitation “**of said rigid film**” in line 4. There is insufficient antecedent basis for this limitation in the claim.

Clarification and/or correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-8, 13-15, 17 and 58-60 are rejected under 35 U.S.C. 102(b) as being anticipated by Tavss et al. (US 5,407,742).

Regarding claims 1-8, 17 and 60, Tavss ('742) teaches a shape-memory polybutylene terephthalate laminate film/(package sheet) (*col. 3, ll. 29-34 and FIGs-1 and 2, #10*) comprising (a) a polybutylene terephthalate film, and (b) a metal foil (*col. 3, ll. 39-40 and FIGs 1-2, #13*).

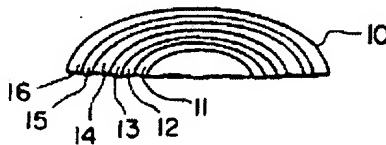
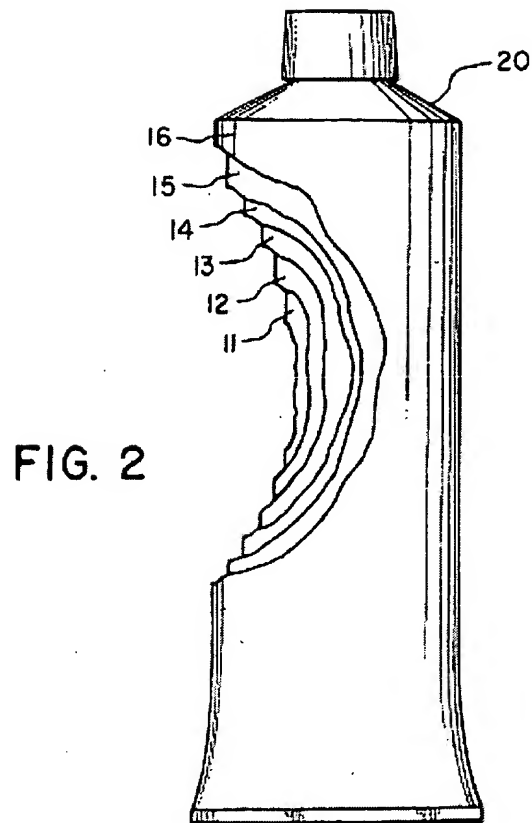


FIG. 1



The phrase "which is subjected to a shaping treatment to the first shape at a temperature T_1 equal to or lower than the glass transition temperature of said polybutylene terephthalate, deformed to a second shape at a temperature T_2 higher than said glass transition temperature, and then cooled to a temperature T_3 equal to or lower than said glass transition temperature so that said laminate film is fixed to said second shape, said polybutylene terephthalate laminate film substantially recovering said first shape from said second shape when exposed to said temperature T_1 or higher" in claim 1, lines 3-10

Art Unit: 1772

"wherein said temperature T_1 is 35 °C or lower, said temperature T_2 is higher than 45 °C and 65 °C or lower, and the temperature T_3 is 15 to 25 °C" in claim 2, lines 2-3;

"wherein said temperature T_1 is 15 to 25 °C" in claim 3, line 2;

"which is subjected to a shaping treatment to the first shape at a temperature T_4 higher than the glass transition temperature and lower than the melting point of said polybutylene terephthalate, cooled to a temperature T_5 equal to or lower than said glass transition temperature so that said laminate film is fixed to said first shape, deformed to a second shape at a temperature T_6 higher than said glass transition temperature and lower than said T_4 , and then cooled to a temperature T_7 equal to or lower than said glass transition temperature so that said laminate film is fixed to said second shape, said polybutylene terephthalate laminate film substantially recovering said first shape from said second shape when exposed to said temperature T_4 or higher" in claim 4, lines 3-12;

"wherein said temperature T_4 is 75 to 100 °C, said temperature T_5 is 40 °C or lower, said temperature T_6 is 45 to 65 °C, and said temperature T_7 is 40 °C or lower" in claim 5, lines 2-3;

"wherein said temperature T_4 is 90 to 100 °C" in claim 6, line 2;

"wherein said first shape is a curled shape, and said second shape is substantially a flat shape or an oppositely curled shape" in claim 7, lines 2-3

"wherein said first shape is a tray shape, and said second shape is a flat shape" in claim 8, lines 2-3; and

Art Unit: 1772

"wherein said polybutylene terephthalate film is formed: by ejecting a humid air through a first cooling ring disposed near an annular die to cool a neck portion of a bubble to 130 °C or lower; by ejecting a humid air through a second cooling ring disposed above the annular die by the distance 5 to 10 times the opening diameter of the annular die to cool said bubble to 80 °C; and by keeping the temperature around a cylindrical net disposed between said first cooling ring and said second cooling ring constant to stabilizing the temperature of said bubble cooled by said first cooling ring and said second cooling ring; at a blow-up ratio of 1.5 to 2.8, a resin extrusion temperature of 210 to 250 °C, and a resin-extruding pressure of 9.8 to 13.7 Mpa" in claim 60, lines 2-10 are process limitations in a product claim and hence not given any patentable weight since patentability of a product does not depend on its **method** of production (*see MPEP § 2173.05(p)*).

Regarding claim 13, Tavss ('742) teaches a film which has a layer structure comprising the polybutylene terephthalate film (*col. 3, ll. 32-33 and FIGs 1-2, #11*), the paper sheet (*col. 3, ll. 49-50 and FIGs-1-2, #15*) and a sealant film in this order (*col. 3, ll. 50-51 and FIGs 1-2, sealant #16*).

Regarding claim 14, Tavss ('742) teaches a film which has a layer structure comprising said polybutylene terephthalate film, the paper sheet, a rigid film and a sealant film in this order (*FIGs 1-2, #16, #15, #13 and #11 from the outside to the inside*).

Regarding claim 15, Tavss ('742) teaches a film which has a layer structure comprising said polybutylene terephthalate film, a rigid film and a sealant film in this order (*FIG-1, #11, #12, and #16 from the inside to outside*).

Regarding claims 58-59, Tavss ('742) teaches a film wherein the polybutylene terephthalate laminate film adheres to another film or film laminate (*col. 3, ll. 37-50*).

The phrase "in a state where the elongated polybutylene terephthalate laminate film keeps an elastic recovery force" in claim 58, lines 3-4 and "where the polybutylene terephthalate laminate film is stretched by 1 to 3%" in claim 59, line 3 are not given any patentable weight since the applicant is introducing non-structural **functional language** into the product claims (*See MPEP 2173.05(g)*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tavss et al. (US 5,407,742) in view of Kobayashi et al. (US 6,543,208).

Tavss ('742) teaches the film discussed above, however, fails to expressly teach a light-screening ink layer on a surface of the polybutylene terephthalate film on the side of the paper sheet, or on a surface of the rigid film on the side of the sealant film.

However, Kobayashi ('208) teaches a light-screening ink layer on a surface of the rigid film on the side of the sealant film (*col. 4, l. 60 to col. 5, l. 1*) for the purpose of protecting the ink from the external environment (*col. 5, ll. 8-11*).

Therefore, it would have been obvious to one having ordinary skill in the art at the time applicant's invention was made to modify Tavss's ('742) laminate with a light-screening ink layer on a surface of the rigid film on the side of the sealant film as taught by Kobayashi ('208) in order to protect the ink from the external environment.

5. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tavss et al. (US 5,407,742).

Tavss ('742) teaches the film discussed above, however fails to expressly teach a container lid constituted by the shape-memory polybutylene terephthalate laminate film, however, Tavss ('742) teaches the use of the above packaging film to protect the packaged product (*col. 3, ll. 32-56*) for the purpose of decreasing the degree of flavorant absorption (*col. 2, ll. 51-52*). Therefore, it would have been obvious to incorporate the film into a lid in order to provide a lid with decreased flavorant absorption.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent T. O'Hern whose telephone number is (571) 272-0496. The examiner can normally be reached on M-F, 9:00-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-2172. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1772

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Brent T O'Hern
Examiner
Art Unit 1772
October 16, 2006



NASSER AHMAD
PRIMARY EXAMINER